

# Dippy on Tour

A Natural History Adventure



Link4Life



In partnership with



Garfield Weston  
FOUNDATION



Debbie Powell for NHM

## KS1

### - Enquiry walk around Dippy

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This resource, for visiting school groups, aims to support teachers and support staff to make the most of the visitor experience to Dippy on Tour in Rochdale.

Key to inspiring the next generation of future scientists is the development of children's scientific enquiry and thinking, enabling them to make predictions and hypotheses using direct observation in and around Dippy and through the exhibition at Touchstones. Through key stage 1, children are expected to use their observations and ideas to suggest answers to questions.

Engaging in dialogue with children through questioning and supporting independent enquiry will enable children and young people to interact with Dippy and the exhibition. This resource aims to enable teachers to develop the curriculum and pre and post visit learning opportunities to match the specific needs of their children.



# Enquiry 1 – What type of animal is Dippy?

## KS1 Working Scientifically Links

- Identifying and classifying
- Using their observations and ideas to suggest answers to questions

## KS1 Science Curriculum Links

- Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores
- Explore and compare the differences between things that are living, dead, and things that have never been alive
- Notice that animals, including humans, have offspring, which grow into adults

## Pre-visit Key Questions

### Pre-visit questions

What is a dinosaur?

What animal group did Dippy belong to?

What does a sauropod look like?

What did Dippy eat?

Did Dippy lay eggs?

### Developing enquiry through direct observation during the visit?

Looking at Dippy, what features of a dinosaur can you see?

What can you see that tells us that Dippy was a sauropod?

How do we know Dippy was a reptile?

## Key Vocabulary

Dinosaur

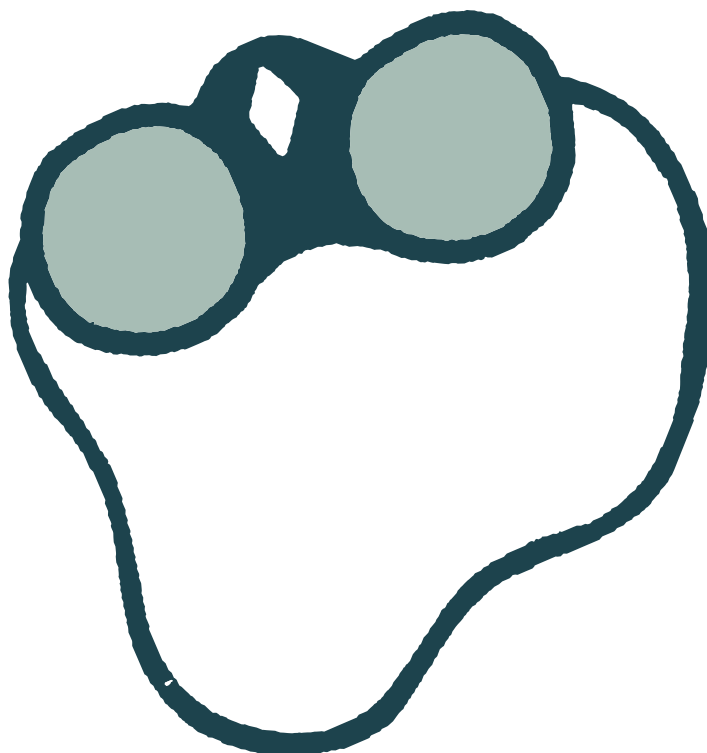
Dinosaurs are a group of reptiles that dominated the land for over 140 million years (more than 160 million years in some parts of the world. Many dinosaurs became extinct around 66 million years ago, but a group of living dinosaurs are still with us today : birds

The following features can be seen in dinosaurs;

An upright stance

- The legs are perpendicular to the body
- The skull has a hole between the eye socket and nostril
- Dinosaurs had two holes behind the eye socket. Large, strong jaw muscles went through the holes to attach directly to the top of the skull

Key Vocabulary	
Reptile	Reptiles are cold-blooded, they use the sun and the shade to regulate their temperature. They are vertebrates (an animal with a back bone or spinal column), most have four legs, they breathe through their lungs, they have scales or scutes and they lay eggs.
Herbivore	An animal that eats only plants.
Sauropod	A very large four-legged herbivorous dinosaur with a long neck and tail, small head, and massive limbs. Dippy is a sauropod.
Dippy Facts	
<ul style="list-style-type: none"> <li>• Dippy is a reptile like all other dinosaurs</li> <li>• Dippy laid eggs</li> <li>• Dippy did not chew its food – it swallowed leaves and ferns whole and digested them in its stomach</li> <li>• Dinosaurs lived more than 160 million years ago in the Mesozoic Era</li> <li>• Dippy was a herbivorous dinosaur</li> <li>• Dippy would have swallowed stones to help him digest his food</li> </ul>	
I wonder...	
<p>I wonder what Dippy ate?  I wonder how Dippy is different to other dinosaurs we know?  Look at Dippy's teeth, how would you describe them?  What do you think Dippy would have eaten?</p>	





## Enquiry 2 – How is Dippy similar to other animals?

### KS1 Working Scientifically Links

- Using their observations and ideas to suggest answers to questions

### KS1 Science Curriculum Links

- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- Identify and name a variety of plants and animals in their habitats, including micro-habitats
- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food
- Notice that animals, including humans, have offspring, which grow into adults

### Key Questions

#### **Pre-visit**

What sort of habitat did Dippy live in?

Did Dippy live alone?

#### **During the visit questions**

What body parts does Dippy have?

Can you count Dippy's vertebrae?

How big do you think Dippy is compared to other animals?

How tall is Dippy? Can you estimate his height in arms' lengths/metres?

Can you think of something that he is taller than and shorter than?

How long is Dippy? Can you estimate his length in strides/metres?

Is Dippy's skeleton similar to our skeleton?

What do you think Dippy would weigh more than and less than?

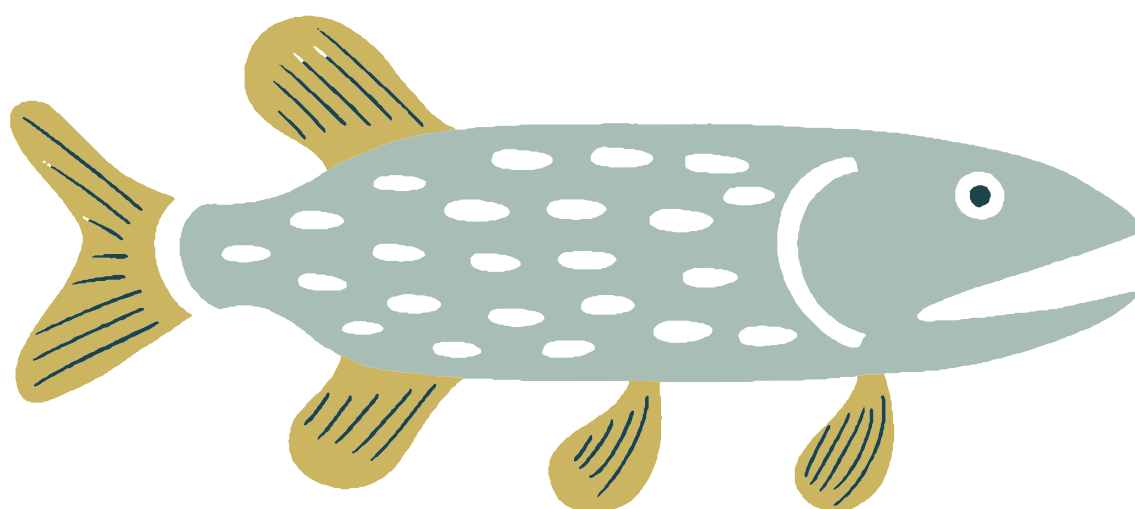
Do you think Dippy moved slowly or quickly? Why do you think that?

Looking at Dippy's skeleton, how do you think Dippy protected itself?

#### **Post visit**

Opportunity for children to complete research from age appropriate reference sources to evidence initial predictions and hypotheses

Key Vocabulary	
Herd	A large group of animals of the same type that live and feed together.
Habitat	The natural environment in which an animal or plant usually lives.
Faeces	The waste passed out of the body of a human or animal through the bowels.
Dippy Facts	
<ul style="list-style-type: none"> <li>• Dippy weighed 20,000kg (the same as 13 cars)</li> <li>• Dippy's skeleton measures 26 metres in length and is over 4 metres both width and height</li> <li>• Dippy's cast has 292 bones</li> <li>• Dippy lived with other Diplodocus in herds</li> <li>• Dippy was quite slow, walking between 5 and 9 miles an hour</li> <li>• Dippy lived for 70 – 80 years, similar to modern day elephants and humans</li> <li>• Dippy had 5 toes spread out to help support its weight. The Diplodocus also had a thumb claw on each foot</li> <li>• Diplodocus faeces may have been a tonne or two of liquid, creating a pool over 10m across</li> </ul>	
I wonder...	
<p>I wonder how Dippy was able to survive?</p> <p>I wonder what habitat Dippy lived in?</p>	



# Enquiry 3 – How do scientists learn about dinosaurs?

## KS1 Working Scientifically Links

- Asking simple questions and recognising that they can be answered in different ways

## KS1 Science Curriculum Links

- Explore and compare the differences between things that are living, dead, and things that have never been alive

## Key Questions

### Pre-visit questions

What is a fossil?

How do scientists use fossils to learn about dinosaurs?

What type of fossils have scientists found?

What happened to dinosaurs?

## Key Vocabulary

Palaeontologists

A scientist that studies organisms that lived on earth before there were written records, especially by examining fossils.

Fossil

The shape of a bone, a shell, or a plant or animal that has been preserved in rock for a very long period.

Species

A set of animals or plants in which the members have similar characteristics to each other and can breed with each other.

## Dippy Facts

- Dippy is not a real fossil. He is a cast of a Diplodocus skeleton
- The original fossil of Dippy was found in Wyoming, America in 1898
- Dinosaur fossils have been found on every continent of Earth, including Antarctica
- Fossils help us understand what dinosaurs were like – fossilized bones, footprints, stomach stones, faeces, internal organs, soft tissue and feathers have all been found
- Some large fossilised dinosaur eggs that were discovered in China were over 60cm long and 20cm wide
- The original fossil of Dippy was found in Wyoming, America in 1898

## I wonder...

I wonder how dinosaur fossils are found?  
I wonder why there are no more dinosaurs on Earth?

# KS1 - Science Curriculum Links Overview

## Year 1 and Year 2: Working Scientifically

- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions

## Year 1: Animals inc. humans

- Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores
- Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)

## Year 2: Living things and their habitats

- Explore and compare the differences between things that are living, dead, and things that have never been alive
- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- Identify and name a variety of plants and animals in their habitats, including micro-habitats
- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food

## Year 2: Animals inc. humans

- Notice that animals, including humans, have offspring, which grow into adults
- Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)

